# Missing Side

It is well known that every triangle has an unique incircle and an unique circumcircle. Given the lengths of two sides of a triangle, determine the length of the missing side, such that the area between incircle and circumcircle is as small as possible.

## Input

Input starts with a positive integer $t \approx 10000$ in a single line, then t lines follow.
Each of the t lines contains the lengths of two sides of a triangle, separated by a single space.
All values are given with four digits after the decimal point and are not larger than 100.

## Output

For every testcase print the length of the missing side that satisfies the condition given above, rounded to four digits after the decimal point. If there is no unique solution, print "ambiguous" (without quotes) instead.

## Example

**Input:**
2
1.8491 3.5678
7.5000 5.1480

**Output:**
3.1416
6.0000